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IN THE CLAIMS

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Please amend the claims as follows:

1. (currently amended) A electrochemical device, comprising: an electrolyte including a cyclic polysiloxane having one or more side chains that each include a poly(alkylene oxide) moiety and a spacer positioned between the poly(alkylene oxide) moiety and a silicon on a main chain of the polysiloxane.

the polysiloxane having a structure represented by the formula:

wherein R is an alkyl or aryl group; R' is an alkyl or aryl

group; R₁ is hydrogen or an alkyl group; R₂ represents the spacer and consists of one or more CH₂ groups; n is up to 100; and x is up to 30.

2.-3. (canceled)

- 4. (previously presented) The device of claim 1, wherein the spacer includes 2 or more CH₂ groups.
- 5. (previously presented) The device of claim 1, wherein the spacer includes 6 or fewer CH₂ groups.
- 6. (canceled)
- 7. (previously presented) The device of claim 1, wherein the cyclic polysiloxane is cross-linked.

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- 8. (canceled)
- 9. (currently amended) The device of claim 8, claim 1, wherein the electrolyte is a liquid.
- 10.-12. (canceled)
- 13. (currently amended) The device of claim 1, wherein the electrolyte includes and further includes:
 - at least one alkali metal salt.
- 14. (previously presented) The device of claim 13, wherein the alkali metal salt is selected from a group consisting of: LiClO₄, LiBF₄, LiAsF₆, LiPF₆, LiCF₃SO₃, Li(CF₃SO₂)₂N, Li(CF₃SO₂)₃C, LiN(SO₂C₂F₅)₂), lithium alkyl fluorophosphates, lithium bis(chelato)borates, LiPF₃(C₂F₅)₃, and LiPF₃(CF₃)₃.
- 15. (previously presented) The device of claim 1, wherein the electrolyte includes a lithium bis(chelato)borate having 5 to 10 membered rings.
- 16. (previously presented) The device of claim 1, wherein the electrolyte includes a lithium bis(chelato)borate having 5 to 7 membered rings.
- 17. (previously presented) The device of claim 1, wherein the cyclic polysiloxane is entrapped within at least one cross-linked network polymer.
- 18. (previously presented) The device of claim 17, wherein the electrolyte is a solid.
- 19. (withdrawn) The device of claim 17, wherein the at least one network polymer includes a poly(methacrylate).

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20. (withdrawn) The device of claim 17, wherein the network polymer is formed from a monomer represented by general formula:

$$\mathbb{R}^{\mathbb{R}^{n}}$$

wherein R is an alkyl group having 1 to 10 carbon atoms; each of R' and R' is selected from the group consisting of: hydrogen, an alkyl group having 1 to 10 carbon atoms, and an alkenyl group having 2 to 12 carbon atoms; X is hydrogen or a methyl group; and n is 1 to 15.

- 21. (previously presented) The device of claim 17, wherein the network polymer includes a cross-linked polysiloxane.
- 22. (previously presented) The device of claim 17, wherein the network polymer includes a polysiloxane where at least a portion of the main chain silicons are linked to side chains that each include a poly(alkylene oxide) moiety.
- 23. (previously presented) The device of claim 22, wherein at least a portion of the main chain silicons are bonded to a cross-linker having a moiety selected from the group consisting of: O-(CH₂CH₂O)_q and Si-O-(Si-O)_k-Si, where q is at least 4 and less than 30, and k is at least 5 and less than 30.
- 24. (previously presented) The device of claim 22, wherein n of the main chain silicons are bonded to a cross-linker and m of the main chain silicons bonded to a side chain, a ratio of n:m being in a range of 1:4 to 1:200.
- 25. (previously presented) The device of claim 24, wherein the ratio of n:m is in a range of 1:6 to 1:100.

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26. (previously presented) The device of claim 1, wherein the electrolyte further includes:

at least one solid polymer.

- 27. (previously presented) The device of claim 26, wherein the at least one solid polymer is selected from the group consisting of: polyacrylonitrile (PAN), poly(methyl methacrylate) (PMMA), poly(vinylidene fluoride) (PVdF), poly(vinylidene fluoride-cohexafluoropropylene), poly(vinyl acetate), polystyrene, and poly(ethylene oxide) (PEO).
- 28. (previously presented) The device of claim 1, wherein the average molecular weight of the cyclic polysiloxane is less than or equal to 20,000 g/mol.
- 29. (previously presented) The device of claim 1, wherein the dynamic viscosity of the cyclic polysiloxane is less than or equal to 10,000 cps.
- 30. (currently amended) The device of claim 1, wherein the a molar ratio of [EO]/[Li] is 5 to 50.
- 31. (previously presented) The device of claim 1, further comprising: at least one lithium metal oxide cathode, at least one porous separator, and at least one anode.
- 32. (previously presented) The device of claim 31, wherein the at least one anode comprises at least one material selected from the group consisting of: carbon and lithium metal.
- 33. (previously presented) The device of claim 1, wherein the electrolyte includes a blend of polysiloxanes.
- 34.-44. (canceled)
- 45. (new) The device of claim 1, wherein the spacer includes 3 or more CH₂ groups.

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- 46. (new) The device of claim 1, wherein R₁ is hydrogen.
- 47. (new) The device of claim 46, wherein the electrolyte further includes a polysiloxane having a structure represented by the formula:

$$\begin{array}{c|c}
R & R^{m} \\
\hline
(S \mid -O)_{n} & (S \mid -O)_{p} \\
\hline
(R_{2} & O)_{x} & R'
\end{array}$$

wherein R is an alkyl group, R' is an alkyl

or aryl group, R''' is alkyl or hydrogen; R_1 is hydrogen or an alkyl group; R_2 is a spacer made up of one or more CH_2 groups; p is greater than 0; n is from 1 to 100; x is from 1 to 30; and Q is a cross-linker linking the polysiloxane to another polysiloxane.

- 48. (new) The device of claim 47, wherein the electrolyte is a solid.
- 49. (new) The device of claim 47, wherein at least a portion of the cross-linkers include a moiety selected from the group consisting of O-(CH₂CH₂O)_q and Si-O-(Si-O)_k-Si, where q is at least 4 and less than 30, and k is at least 5 and less than 30.